

Ordering effects, segregation to defects and diffusion phenomena in HEAs and CCAs – subgroup of SPP2006

Virtual meeting: <https://ruhr-uni-bochum.zoom.us/j/98820137821?pwd=NE5QM3NQLy9tVjdiSjFLbEVuenJ4OT09>

* Invited presentations: 30 min + 10 min discussion

Regular presentations: 20 min + 10 min discussion

11.10.2022

Session 1: Ordering effects and phase stability in FCC HEAs

8:55-9:00

Guillaume Laplanche, Ruhr-Universität Bochum, Germany
Welcome and presentation of the meeting

9:00-9:40

* **Kyosuke Kishida**, Kyoto University, Japan
Room temperature deformation behavior of hard intermetallic compounds investigated by micropillar compression method and atomic resolution electron microscopy

9:40-10:10

Sheuly Ghosh, Max-Planck-Institut für Eisenforschung, Düsseldorf, Germany
Short range order and phase stability in CrCoNi medium entropy alloy

10:10-10:40

Shabnam Taheriniya, Universität Münster, Germany
The effect of short range order on enhanced ferromagnetism in CoCrFeMnNi after severe plastic deformation

10:40-11:00

COFFEE BREAK

11:00

Session 2: Short-range order studied by EXAFS

11:00-11:40

* **Andrea Fantin**, TU Berlin and Helmholtz-Zentrum Berlin, Berlin, Germany
An overview on short-range order and lattice distortions in selected bcc, hcp and fcc-based high entropy alloys

11:40-12:10

Alevtina Smekhova, Helmholtz-Zentrum Berlin, Germany
Advanced characterization of high-entropy alloys at the atomic scale: is there an access to the short ordering effects?

12:10-13:20

LUNCH BREAK

13:20

Session 3: Diffusion phenomena in compositionally complex solid solutions and intermetallics

13:20-14:00

* **Sergiy Divinski**, Universität Münster, Germany
Diffusion in HEAs: impact of short-range order and phase decomposition

14:00-14:30

Maik Rajkowski, Ruhr-Universität Bochum, Germany
Phase stability and diffusion kinetics in quaternary Co-Cr-Ni-W medium-entropy alloys

14:30-15:00

Oluwabi Oluwaseyi, Ruhr-Universität Bochum, Germany
HE-SMAs – Atomic mobilities and martensitic transformations in NiTi-based shape memory alloys

15:00-15:30

Mohan Muralikrishna Garlapati, Universität Münster, Germany
Diffusion in atomically ordered multicomponent aluminides

15:30-15:45

COFFEE BREAK

15:45

Session 4: BCC Refractory HEAs

15:45-16:15

Jin Wang, Forschungszentrum Jülich GmbH, Germany
Ductility at room temperature of BCC-RHEAs

16:15-16:45

Yilun Gong, Max-Planck-Institut für Eisenforschung, Düsseldorf, Germany
Ab initio study of interstitial alloying, phase stability and short-range ordering in refractory high entropy alloys

16:45

TIME FOR DISCUSSION

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